

Michael F. Richards

SCIENTIST

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Michael Richards assists with the preparation and prosecution of patents, as well as petitions for *inter partes* review, to support clients across a variety of fields. His experience covers numerous areas of electrical engineering, including semiconductors and solid-state physics, photonics and optoelectronics, quantum optics and electronics, spintronics, nanotechnology, metamaterials, mechatronics and medical devices. He also has significant experience drafting patent applications related to wireless communication and video coding standards.

Michael leverages his technical foundation to analyze complex technologies and develop precise, strategic approaches to intellectual property protection. He applies his technical insight to anticipate challenges, strengthen patent portfolios and support clients in both prosecution and post-grant proceedings. Through careful attention to detail and a focus on aligning legal strategies with business priorities, Michael works to secure and protect the innovations that drive his clients' success.

Prior to joining Polsinelli, Michael gained research and engineering experience as an undergraduate researcher at Northwestern's Center for Quantum Devices, where he contributed to work on III-Nitride semiconductors with applications in novel solid-state photonic devices. During his graduate studies, Michael focused on the transient behavior of disordered solid-state systems, research with implications across a wide range of fields.

Education

- Northwestern University (B.S./M.S., *Dean's List*)
 - Electrical Engineering
 - Best Master's Thesis in Electrical Engineering, 2024 (awarded by the Department of Electrical and Computer Engineering, Northwestern University)
 - Outstanding Undergraduate Researcher Award, 2023 (awarded by the Department of Electrical and Computer Engineering, Northwestern University)
 - Summer Undergraduate Research Grant Recipient, 2022 (awarded by Northwestern University)

Capabilities

- Intellectual Property
- Patent Preparation & Prosecution
- Post-Grant Proceedings

Languages

- German

Publications

March 2025

Degradation of Organic LEDs Characterized with Algebraic Decay Relaxation Function

SPIE Conference Proceeding Paper

February 2025

Structural Characterization via X-Ray Crystallography of III-Nitrides for APDs

Northwestern Undergraduate Research Journal

October 2023

Solar-blind Deep UV Avalanche Photodetectors Using Reduced Area Epitaxy

IEEE Journal of Quantum Electronics